

Chicago Regional Middle School Science Bowl

Academic and Solar Car Race Competitions

The U.S. Department of Energy (DOE) and Argonne National Laboratory (ANL) are pleased to announce the 2003 Chicago Regional Middle School Science Bowl, a competition to encourage student involvement in math and science activities, improve awareness of career options in science and technology, and provide an avenue of enrichment and reward for academic science achievement. There are two distinct events that comprise the Middle School Science Bowl: an **Academic Competition**, and a **Solar Car Competition**. The events are held on two separate days, and the winning team of each competition receives an award. Teams of sixth, seventh, and eighth-graders are invited to participate in one or both events. Of the teams participating in both events, the team with the best combined score will represent the region at the national competition, June 25-28, in Golden, Colorado. To be eligible for the national competition, teams must consist of four students from one school with one or two coaches. Teams of four home-school students, ages 11-14, are eligible as well.

There are still a limited number of dual-event slots, and we've extended the registration deadline to March 22nd... so register your team by mail, FAX, or phone SOON!

Academic Competition (Question & Answer)

The Academic Competition portion of the Chicago Science Bowl will be held on April 5th at Argonne National Laboratory in Argonne, IL. Sixteen teams will compete in this fast-paced "quiz-show" style, head-to-head competition, which will include round-robin and double-elimination components.

In this competition students answer either multiple-choice or short-answer questions relating to science and math facts or concepts. There are two types of question: "toss-up" and "bonus." Toss-up questions (4 points) may be answered by any member of either team, with no collaboration. Teams successfully answering a toss-up question get a chance to answer a bonus question (10 points), on which team members may collaborate. A representative set of practice questions will be sent to each participating team.



2001 Chicago Solar Sprint winners from Madison JHS, Naperville, IL

13th Annual Solar Car Competition

DOE and Argonne are joined by CNH Global, the Illinois Department of Commerce and Community Affairs, and the Society of Automotive Engineering in sponsoring the Solar Car portion of the Chicago Regional Middle School Science Bowl, which will be held on May 3, at CNH Global in Burr Ridge, Illinois.

This competition requires students to use aerodynamics, applied science, and engineering skills to meet technical challenges comparable to those that scientists and engineers face to build a lightweight, functional vehicle with an efficient powertrain, low-drag aerodynamics, minimal friction, and excellent performance. Developing a successful design requires experimentation, teamwork, and organization.

Teams must use a solar car kit consisting of a solar panel and motor; however, the remainder of the vehicle must be the students' own design and can be made from any material. The cars, powered entirely by solar energy, are guided by wires running the length of the course. The race will be run in heats until the top-performing cars are determined. In addition to prizes awarded to top-performing teams, design awards will be given based on technology, craftsmanship, appearance of the car, and a working knowledge of the car's design.

To be eligible to represent the region in the National Middle School Science Bowl, teams must enter both the Solar Car Competition and the Academic competition.

Registration for Solar-only teams will remain open until April 2nd, unless all slots have filled.

More Information?

Check out our Science Bowl's website:

<http://www.dep.anl.gov/science-bowl>

Practice questions, rules, where to get car kits, etc.

If you would like more information on the 2003 Chicago Regional Middle School Science Bowl, FAX your name, school name & address, and phone number to Christine McGhee at 630 252-3443 or email cmcghee@anl.gov